Form PTO-1449

OCT 2 2 2004

PAUEN

U.S. Department of Commerce Patent and Trademark Office

INFORMATION DISCLOSURE STATEMENT BY APPLICANT Atty. Docket No.

Serial No.

00-713-i13

09/975,384

Applicant: Mirkin, et al.

Filing Date: October 11, 2001

Group: 1637

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date
14	1.	6,361,944	03/26/02	Mirkin, et al.	435	6	06/25/99
7	2.	6,417,340	07/09/02	Mirkin, et al.	536	23.1	10/20/00
	3.	6,495,324	12/17/02	Mirkin, et al.	435	6	10/20/00
	4.	6,506,564	01/14/03	Mirkin, et al.	435	6	06/26/00
	5.	6,582,921	06/24/03	Mirkin, et al.	435	6	09/20/01
	6.	6,602,669	08/05/03	Mirkin, et al.	435	6	07/11/01
	7.	6,610,491	08/26/03	Mirkin, et al.	435	6	09/28/01
	8.	6,645,721	11/11/03	Mirkin, et al.	435	6	09/20/01
	9.	6,673,548	01/06/04	Mirkin, et al.	435	6	09/28/01
	10.	6,677,122	01/13/04	Mirkin, et al.	435	6	10/11/01
	11.	6,682,895	01/27/04	Mirkin, et al.	435	6	10/12/01
	12.	6,709,825	03/23/04	Mirkin, et al.	435	6	09/28/01
	13.	6,720,147	04/13/04	Mirkin, et al.	435	6	10/12/01
	14.	6,720,411	04/13/04	Mirkin, et al.	536	23.1	10/10/01
	15.	6,726,847	04/27/04	Mirkin, et al.	216	90	11/30/01
	16.	6,730,269	05/04/04	Mirkin, et al.	422	68.1	10/12/01
	17.	6,740,491	05/25/04	Mirkin, et al.	435	6	09/28/01
	18.	6,750,016	06/15/04	Mirkin, et al.	435	6	03/28/01
	19.	6,759,199	07/06/04	Mirkin, et al.	435	6	09/20/01
	20.	6,767,702	07/27/04	Mirkin, et al.	435	6	01/12/01
	21.	6,773,884	08/10/04	Mirkin, et al.	435	6	08/07/01
	22.	6,777,186	08/17/04	Mirkin, et al.	435	6	10/15/01
	23.	2002/0137070 A1	09/26/02	Mirkin, et al.	435	6	10/10/01
	24.	2002/0155461 A1	10/24/02	Mirkin, et al.	435	6	10/12/01
	25.	2002/0160381 A1	10/31/02	Mirkin, et al.	435	6	10/11/01
	26.	2002/0177143 A1	11/28/02	Mirkin, et al.	435	6	12/28/01
	27.	2002/0192687 A1	12/19/02	Mirkin, et al.	435	6	03/27/02
	28.	2003/0054358 A1	03/20/03	Mirkin, et al.	435	6	10/11/01
_JL	29.	2003/0068622 A1	04/10/03	Mirkin, et al.	435	6	10/12/01

	U	30.	2003/0068638 A1	04/10/03	Mirkin, et al.	435	6	08/02/02
	1	• 31.	2003/0087242 A1	05/08/03	Mirkin,et al.	435	6	12/07/01
-		32.	2003/0113740 A1	06/19/03	Mirkin, et al.	435	6	04/18/02
	\bot	33.	2003/0124528 A1	07/3/03	Mirkin, et al.	435	6	10/12/01
TF	· c,	34.	2003/0129608 A1	07/10/03	Mirkin, et al.	435	6	05/22/02
	2004	₿5.	2003/0143538 A1	07/31/03	Mirkin, et al.	435	6	10/11/01
act	•	6.	2003/0143598 A1	07/31/03	Mirkin, et al.	435	6	11/08/02
37.	THADEMAR	37.	2003/0148282 A1	08/07/03	Mirkin, et al.	435	6	10/12/01
	THAOS	38.	2003/0207296 A1	11/06/03	Mirkin, et al.	435	6	10/08/02
		39.	2003/0211488 A1	11/13/03	Mirkin, et al.	435	6	06/14/02
Ŀ		40.	2004/0038255 A1	02/26/04	Mirkin, et al.	435	6	03/26/03
		41.	2004/0053222 A1	03/18/04	Mirkin, et al.	435	6	07/02/03
		42.	2004/0072231 A1	04/15/04	Mirkin, et al.	435	6	08/13/03
		43.	2004/0086897 A1	05/06/04	Mirkin, et al.	435	6	05/07/03
	M	44.	2004/0101889 A1	05/27/04	Mirkin, et al.	435	6	08/04/03

FOREIGN PATENT DOCUMENTS

		Document Number	Date		Country	Class	Subclass	Translation Yes No
U	45.	WO 98/04740 A1	02/05/98	PCT		1	/	
ì	46.	WO 00/33079 A1	06/08/00	PCT		1 (
	47.	WO 01/00876 A1	01/04/01	PCT	-			<u> </u>
	48.	WO 01/051665 A2	07/19/01	PCT		 	 	
	49.	WO 01/073123 A3	10/04/01	PCT		1/		
	50.	WO 02/004681 A3	01/17/02	PCT	· · ·	1/	/	
	51.	WO 02/018643 A3	03/07/02	PCT		1		
	52.	WO 02/046472 A3	06/13/02	PCT				
	53.	WO 02/079490 A3	10/10/02	PCT	•		 	<u> </u>
	54.	WO 02/096262 A2	12/05/02	PCT		+)-	 	
	55.	WO 2003/008539 A3	01/30/03	PCT		 	 	
	56.	WO 2003/035829 A3	05/01/03	PCT	·	1/-	(
	57.	WO 2003/081202 A3	10/02/03	PCT		1(-		
 	58.	WO 2003/087188 A1	10/23/03	PCT	_	+	 	
	59.	WO 2003/095973 A2	11/20/03	PCT		+)	 (
	60.	WO 2004/004647 A3	01/31/04	PCT		+ /	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ 	
11	61.	WO 2004/053105 A2	06/24/04	PCT		+ (

Examiner	Date Considered
De h.	4/19/05

EXAMINER: Initial if/citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with any communication.

FORM PTO-1449 U.S. Department of Commerce (Rev. 2-32) **Patent and Trademark Office**

Atty. Docket No.

Serial No.

Sheet 1 of 3

INFORMATION DISCLOSURE

00-713i13

09/975,384

JUL 0 8 2004

STATEMENT BY APPLICANT (Use several sheets if necessary)

Applicant:

Chad A. Mirkin, et al.

Filing Date:

Group:

October 11, 2001

1637

ILS PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name Name	Class	Subclass	Filing Date if Appropriate	
B	1.	5,830,986	11/03/98	Merrill, et al.	528	332	10/28/96	
	2.	5,900,481	05/04/99	Lough, et al.	536	55.3	11/06/96	
	3.	6,203,989	03/20/01	Goldberg, et al	435	6	03/25/99	
	4.	6,251,303	06/26/01	Bawendi, et al.	252	301.4R	09/18/98	
	5.	6,277,489	08/21/01	Abbott, et al.	428	403	12/04/98	
	6.	6,306,610	10/23/01	Bawendi, et al.	435	7.1	09/17/99	
	7.	6,361,944	03/26/02	Mirkin, et al.	435	6	06/25/99	
	8.	6,365,418	04/02/02	Wagner, et al.	436	518	05/18/00	
Ù	9.	6,417,340	07/09/02	Mirkin, et al.	536	23.1	10/20/00	

Translation Document Number Date Country Class Subclass Yes Nο 10. WO 93/25709 23 December 1993 **PCT** 11. WO 98/04740 5 February 1998 PCT. 12. WO 98/17317 30 April 1998 **PCT** 13. WO 99/60169 25 November 1999 PCT 14. WO 00/33079 8 June 2002

PCT

PCT

FOREIGN PATENT DOCUMENTS

EXAMINER DATE CONSIDERED 4/19/05

4 January 2001

EXAMINER: Initial/if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

MCDONNELL BOEHNEN MULBERT & BERGHOFF 300 SOUTH WACKER DRIVE CHICAGO, ILLINOIS BOES TIT TENONT HER CETATOR

15.

WO 01/00876

Sheet 2 of 3 **FORM PTO-1449**

(Rev. 2-32)

U.S. Department of Commerce Patent and Trademark Office Atty. Docket No.

Serial No.

00-713-113

09/975,384

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant

Chad A. Mirkin, et al.

Filing Date:

Group:

October 11, 2001

1637

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if
				Liass	Sunciass	Appropriate

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes No
14	16.	WO 01/51665	19 July 2001	PCT			
	17.	WO 01/73123	4 October 2001	PCT			
	18.	WO 01/86301	15 November 2001	PCT			
	19.	WO 02/04681 .	17 January 2002	PCT			
	20.	WO 02/18643	7 March 2002	PCT	1		
	21.	WO 02/36169	10 May 2002	PCT			
	22.	WO 02/46483	13 June 2002	PCT	1/		
M	23.	WO 02/46472	13 June 2002	PCT)	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

4	24.	Letsinger, R., et al., "Chemistry of Oligonucleotide-Gold Nanoparticle Conjugates," <i>Phosphorus, Sulfur and Silicon</i> , Volume 144, p. 359-362 (1999)
u	25.	Letsinger, R., et al., "Use of a Steroid Cyclic Disulfide Anchor in Constructing Gold Nanoparticle—Oligonucleotide Conjugates," Bioconjugate Chem, p. 289-291 (2000)

	 حــ ,			
EXAMINER	1	DATE CO	NSIDERED	4/19/05
	 _			

EXAMINER: Initial (if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

MCDONNELL BOEWNEN HULBERT & BERGHOFF 300 SOUTH WACKER ORIVE CHICAGO, ILLINGIS 60608

							Sheet 3 of 3
FORM PTO-1 (Rev. 2-32)	1449	U.S. Department of Patent and Trade	Commerce	Atty. D	ocket No	. Se	erial No.
1011				00-713	i 13	09	9/975,384
(JUL 08	INFORMATION DIS STATEMENT BY A		•				
PATTER TO THE OPEN	(Use several sheets it	f necessary)					
W. Der	AOV.			Applica	int		
				Chad A.	Mirkin, et	al.	
•	• • •			Filing C	ate:	Gr	oup:
				Octobe	11, 200	1 16	37
		U.S. PATENT DOCI	IMENTS				•
Examiner Initial .	Document Number	Date	Name		Class	Subclass	Filing Date if Appropriate

	FOREIGN PATENT I	OCUMENTS			
Document Number	Date	Country	Class	Subclass	Translation
		·			

0	0.0	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
4	26.	Li Z., et al., "Multiple thiol-anchor capped DNA-gold nanoparticle conjugates," Nucleic Acids Research, Volume 30,,p. 1558-1562 (2002)
	27.	Nuzzo R., et al., "Spontaneously Organized Molecular Assemblies. 3. Preparation and Properties of Solution Adsorbed Monolayers of Organic Disulfides on Gold Surfaces, " J. Am Chem. Soc., Volume 109, p. 2358-2368 (1987)
	28.	Otsuka, H., et al., "Quantitative and Reversible Lectin-Induced Association of Gold Nonoparticles Modified with D-Lactosyl-D-mercapto-poly(ethyleneglycol)," J. Am Chem. Soc., Volume 123, p. 8226-8230 (2001)
Ù	29.	Wuelfing, P., et al., "Nanometer Gold Clusters Protected by Surface-Bound Monolayers of Thiolated Poly(ethylene glycol) Polymer Electrolyte," J. Am Chem. Soc., Volume 120, p. 12696-12697 (1998)

EXAMINER	1	leh-	DATE CONSIDERED	4/19/05
EVALUED. I	-7-1			

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

MCDONNELL BOEHNEN HALBERT & BERGHOFF 300 SOUTH WACKER DRIVE CHICAGO, ILLINOIS 60608